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SNOW SURVEYS AND IRRIGATION WATER FORECASTS
FOR
RIO GRANDE BASIN
April 1, 1938

The following data pertaining to snow surveys and irrigation water-supply forecasts are provided by Bureau of Agricultural Engineering of the U. S. Department of Agriculture, in cooperation with State Departments, other Federal bureaus and local organizations. The snow measurements are made principally by field personnel of the U. S. Forest Service and Colorado State Engineer. This work is otherwise conducted cooperatively with the State Engineers of Colorado and New Mexico, U. S. Weather Bureau, and Colorado Agricultural Experiment Station, and various municipalities, irrigation associations and others.

Precipitation on the watershed of the Rio Grande in the northern part of New Mexico averaged 1.5 inches during March and for the period from October to March inclusive it was 5.60 inches which is .72 inch below normal. In the San Luis Valley in Colorado, precipitation during March was 1.33 inches or .77 inch above normal. For the period from October to March inclusive it was 2.52 inches which is 0.32 inch above normal. For the Canadian River watershed, in New Mexico, the average precipitation during March was 0.6 inch and the total precipitation from October to March was 2.85 inches which is 2.02 inches below normal. For the Pecos, San Juan and Gila River watersheds the precipitation during March was respectively 0.52, 1.97 and 1.33 inches and from October to March inclusive, it was 4.31, 5.25 and 5.95 inches. For this period the precipitation on the Pecos was normal, on the San Juan it was 0.64 inch and on the Gila it was 0.70 inch above normal.

The water content of the snow on the watershed of the Rio Grande in Colorado and New Mexico increased 2.5 inches during the month of March. On April 1 the average water content of the snow on the watershed of the Rio Grande was 9.7 inches which is 25 percent less than it was last year at this time. On the watershed of the Canadian the water content of the snow increased 1.2 inches during the month of March. On April 1 the water content of the snow was 4.0 inches or 30 percent less than it was on April 1, 1937. At the present time the indications are that the runoff from these streams will be considerably less than last year.

Water in storage in the reservoirs in the San Luis Valley in Colorado is 14 percent less than it was on April 1, 1937. Reservoirs on the Rio Grande in New Mexico, however, have 40 percent more water in storage.

Soil moisture conditions in the San Luis Valley are excellent and in New Mexico they are about normal.

(8312-38)

Summary of Federal and State Cooperative Snow Surveys
Bureau of Agricultural Engineering, U. S. Dept. Agri.; Forest Service; Colo. Agri. Expt. Station
Issued April 10, 1938 Colo. Expt. Station, Fort Collins, Colo.

No.	Main Drainage and Snow Course	Local Drainage	Location			Elev.	National Forest	Apr.1 Snow Course Measurements					
			State	Locality	Description			Av. Snow Depth			Av. Water Content		
								1936	1937	1938	1936	1937	1938
	RIO GRANDE												
26	Wolf Creek Pass	South Fork	Colo.	Wolf Cr. Pass	4-37N-2E	10000	Rio Grande	79.7	115.1	111.3	26.8	41.8	39.4
27	Upper Rio Grande	Rio Grande	"	Rio Grande Res.	13-40N-4W	9350	" "	18.3	35.9	30.0	4.4	8.8	5.6
28	Cumbres Pass*	Los Pinos R.	"	Cumbres Pass	17-32N-5E	10000	" "	70.5	104.4	82.9	30.7	40.8	31.6
74	LaVeta Pass No.2	San.Cristo Cr.	"	LaVeta Pass	23-28S-70W	9300	Off Forest	8.5#	31.5#	37.5	2.0#	9.3#	10.2
47	Silver Lakes	Alamosa R.	"	1mi.S.Silver L.	15-36N-5E	9600	Rio Grande	----	27.1	30.4	----	7.0	8.2
49	River Springs	Conejos R.	"	10mi.W.Mogote	25-33N-6E	9300	" "	----	35.6	36.2	----	12.7	10.1
1	Red River	Red River	N.Mex.	6mi.SE.Red River	29-28N-15E	9500	Carson	----	38.2	29.5	----	12.8	8.0
2	Taos Canon	Rio de Taos	"	14mi.E.Taos	10-25N-15E	9000	"	----	27.4	12.2	----	8.6	3.6
3	Holman Hill	Rio Pueblo	"	15mi.E.Penasco	10-22N-14E	9400	"	----	4.9	----	----	1.0	----
4	Aspen Grove	Rio En Medio	"	10mi.NE.Santa Fe	12-18N-10E	9100	Santa Fe	----	6.5	0.6	----	2.2	0.1
5	Lee Ranch	Jemez Cr.	"	5mi.NW.Bland	3-18N-4E	9050	" "	----	27.5	11.5	----	8.1	2.9
6	Canjilon	Canjilon Cr.	"	8mi.NE.Canjilon	4-26N-6E	9500	Carson	----	62.8ϕ	53.9	----	26.8ϕ	18.7
7	Rio Nutrias	Rio Nutrias	"	10mi.SE.ParkView	6-27N-5E	7900	"	----	18.8	6.1	----	7.7	1.3
8	Panchuela	Panchuela Cr.	"	1mi.N.Cowles	34-19N-12E	8500	Santa Fe	----	2.3	0.0	----	1.0	0.0
9	Hematite Park*	Red River	"	3mi.SE.Red R.	8-28N-15E	9500	Carson	----	22.2	22.1	----	7.5	5.4
12	Tres Ritos	Agua Piedra	"	7mi.W.Holman	23-22N-13E	9000	"	----	----	4.3	----	---	1.0
	CANADIAN												
9	Hematite Park	Moreno Cr.	"	3mi.SE.Red R.	8-28N-15E	9500	Carson	----	22.2	22.1	----	7.5	5.4
10	Ocate Mesa	Ocate Cr.	"	3mi.E.Black Lake	25-24N-16E	9200	Off Forest	----	10.6	12.5	----	4.0	2.7

*On adjacent drainage
Readings on original course
ϕ Snow tube too short to reach bottom of drifts